Austrian and the German meteorological societies. Jelinek died at the age of 59, October 19, 1876; and on March 1, 1877, Prof. Julius Hann succeeded him. Under his administration the institution, the meteorological society, and its journal became the leading authorities in this branch of science. Hann paid special attention to the development of mountain stations. Fifty-two high stations, 6 of which are more than 12,000 feet above sea level, were established under his initiative. He also established 25 stations with self-recording instruments in Austria. He was the first director who at the same time personally and completely filled the rôle of professor in the university. He collected about himself a large number of scholars who devoted themselves wholly to meteorology, forming an Austrian school that has had a wide influence in meteorology. His own investigations in climatology and meteorology have given him the highest position in this department of science. He resigned the directorship on account of poor health, in 1897, but after three years absence at the University of Gratz, his alma mater, he returned to Vienna. The aim of his successor, Professor Pernter, is to maintain the great reputation of the establishment for activity in scientific research as well as practical usefulness. Ever since the war of 1859 the Central Anstalt has been greatly hampered by the want of funds, but Dr. Pernter has been able to secure the means for making kite and balloon ascensions and thus extending to southern Europe the exploration of the atmosphere that has been actively carried on in Russia, Germany, and France. Twelve such Austrian ascensions were made during the year 1901. The memorial volume of the Central Anstalt, and the Lehrbuch der Meteorologie, also published at the same time, are already recognized as classics in the literature of the science. The Central Anstalt includes in its personnel, beside the director, Pernter; the vice director, Kostlivy; the scientific assistants, Margules and Felix Exner, (son of Prof. Franz Exner); the chief of the observatory, Pircher; the chief in charge of stations and publications, Valentin; the chief in charge of weather telegraphy and forecasts, Kostlivy. There are 26 paid employees of all grades. In addition to these, an honorary position has been established known as "Corresponding Member of the Institution." This was especially appropriate to Prof. Julius Hann, who was the first incumbent, March 22, 1901. But since that date many others have been happily associated with him, and the list of correspondents embraces all in Austria-Hungary who have distinguished themselves by work in meteorology.—*C. A.*

WEATHER BUREAU MEN AS INSTRUCTORS.

Mr. Charles Stewart, Observer, Spokane, Wash., addressed the Spokane Science Club, June 14, on "Meteorological instruments and methods of the Weather Bureau."

Mr. J. Warren Smith, Section Director, Columbus, Ohio, on June 4, delivered a lecture on meteorology, at the local office of the Weather Bureau, to the class in geology of the Ohio State University.

On June 17 he addressed a meeting of the Ohio Workers in Agriculture, explaining how forecasts are made and outlining the forecast distribution by means of telephones.

The faculty of Norwich University, at Northfield, Vt., has adopted the following resolution:

Resolved, That the thanks of the Faculty of Norwich University be extended to Mr. William A. Shaw, of the United States Weather Bureau, who has, without remuneration, taught meteorology in this institution, in an efficient manner, for the past eight years.

Mr. J. B. Marbury, Local Forecaster, Atlanta, Ga., lectured on July 1 before the Georgia Educational Association on "The Weather Bureau, its Relation and Benefits to the Public." He explained how forecasts are made and distributed, showed the fallacy of the so-called long-range forecasts, spoke of the value of the Climate and Crop Service, and showed how useful to the public are the records of the Bureau, in addition to their value in forecasting.

METEOROLOGY IN THE COLLEGES AND UNIVERSITIES.

A letter from Mr. G. A. Loveland, Section Director, Lincoln, Nebr., dated June 23, says:

The University of Nebraska is now building a new physics building, with provision for this office and a department of instruction in meteorology. The professor of physics, D. B. Brace, is an investigator who has already encouraged students to work along meteorological lines. An article by one of his students has already been published in the REVIEW. I expect cooperation and help from Professor Brace and the students of his department, and hope for more rapid progress in developing meteorology as a department of instruction under these conditions.

A great aid to teachers and all users of the REVIEW would be cards (for a card catalogue) for each article in the REVIEW not relating to current weather conditions, or at least for the more important articles. I think all Weather Bureau stations furnished a file of the REVIEW should have such a card catalogue, and best of all the Weather Bureau stations constantly called upon for information should be furnished, if possible, with a card catalogue of the important articles in the whole file of Reviews, the reports of the Chief of Bureau, and bulletins of the Bureau. That is, all officials expecting to answer questions should have a card catalogue of the publications of the Bureau, that they may be able to consult authorities readily and answer questions promptly and efficiently. If the cards for each Review were printed at the same time the REVIEW was, a beginning in this direction would be made.

In 1903, the Secretary of Agriculture arranged for a course of instruction in meteorology in the department of agriculture of the North Carolina Agricultural and Mechanical College at West Raleigh at the request of the officials of that institution, and directed that the Weather Bureau send a competent man for that purpose. The college is a mile and a half west of Raleigh. Meteorological instruments for educational purposes were furnished by the Weather Bureau. Of course it was not intended to establish a regular observing station. Mr. C. F. von Herrmann, Section Director, was assigned to the duty of instruction and authorized to absent himself from the station as far as necessary in order to conduct the course. The original plan comprehended a full course for recitations of one hour, weekly, for thirty-six weeks, in the senior class, using Waldo's elementary meteorology as a text-book. In addition, a course of lectures to be given covering the following ten topics:

1. The atmosphere; composition, density, arrangement, physical properties, etc.
2. The temperature of the atmosphere.
3. The temperature of the atmosphere with reference to the climates of the earth.
4. The pressure of the air.
5. The moisture of the air, its condensation into frost, dew, fog, cloud, etc.
6. Precipitation.
7. Winds and the general circulation.
8. Weather; cyclones and anticyclones.
9. Local storms, thunderstorms, tornadoes, subtropical storms.
10. Climate.

Concerning this course of instruction, the professor of agriculture, Dr. Charles W. Burkett, under date of June 18, 1904, writes as follows:

The North Carolina Agricultural and Mechanical College now provides a course in meteorology that extends through the first two terms of the senior year. This course is required of all seniors in the agricultural course, and, personally, I think it is one of the most available courses, and one of the most important that we have in our agricultural course. The course in meteorology is now maintained through the kindness of the Honorable Secretary of Agriculture, who furnishes us the services of the director of the North Carolina section of the Weather Bureau. I am so convinced of the importance of meteorology that I look to see the